

60246-214
10678**REMARKS**

Claims 5, 7, 15 and 16 stand rejected under 35 USC 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter that Applicant regards as the invention. Claims 5, 7, 15 and 16 have been amended to clarify the meaning of "open" and "close."

Claims 4, 14-17 and 18-20 stand rejected under 35 USC 101 because the claimed invention is directed to non-statutory subject matter. The Examiner states that flowing the refrigerant through the expansion valve does not provide any useful improvement since the refrigerant will absorb heat after flowing through the expansion valve and the efficiency will be worse than bypassing the expansion valve. Applicant respectfully disagrees. Applicant is claiming a new configuration for defrosting a heat accepting heat exchanger of a refrigeration system. The Examiner states that the efficiency of the system will decrease because the refrigerant will absorb heat after flowing through the expansion valve. However the refrigerant needs to be heated to melt any frost on the heat accepting heat exchanger. This is a useful improvement. The rejection is improper, and Applicant respectfully requests that the rejection be withdrawn.

Claim 1 stands rejected under 35 USC 102(b) as being anticipated by Vogel (U.S. Patent No. 5,575,158). Vogel does not teach a refrigeration system including a refrigerant line that bypasses a heat rejecting heat exchanger between a discharge of a compression device and an inlet of an expansion device and a valve located on the refrigerant line. Vogel discloses a refrigeration system including a valve 66 located at the inlet of an expansion device 68. The valve is not located on a refrigerant line that bypasses the heat rejecting heat exchanger 26 between the discharge of the compression device 10 and an inlet of an expansion device 68 as claimed. Vogel includes no such line between the compression device 10 and the expansion device 68. Vogel does not disclose the claimed invention, and Applicant respectfully requests that the rejection be withdrawn.

Claims 1 and 2 stand rejected under 35 USC 102(e) as being anticipated by Kuwabara (U.S. Patent Application 2004/0020230). Kuwabara does not teach a refrigeration system including a refrigerant line that bypasses a heat rejecting heat exchanger between a discharge of a compression device and an inlet of an expansion device and a valve located on the refrigerant line. Kuwabara discloses a refrigeration system including a valve 15 located at the outlet of an

60246-214
10678

expansion device 5. The valve is not located on a refrigerant line bypassing a heat rejecting heat exchanger 3 and extending between the discharge of the compression device 1 to an inlet of an expansion device 5 as claimed. Nakayama includes no such line, and the valve 15 is located at the outlet of the expansion device 5. Nakayama does not disclose the claimed invention, and Applicant respectfully requests that the rejection be withdrawn.

Claims 1-3 and 5-7 stand rejected under 35 USC 102(e) as being anticipated by Nakayama (JP 20032291). Nakayama does not teach a refrigeration system including a refrigerant line that bypasses a heat rejecting heat exchanger between a discharge of a compression device to an inlet of an expansion device and a valve on the refrigerant line. Nakayama discloses a refrigeration system including a valve 39 located at the outlet of an expansion device 27. The valve 34 is not located on a refrigerant line bypassing a heat rejecting heat exchanger 26 between the discharge of the compression device 25 to an inlet of an expansion device 27 as claimed. Nakayama includes no such line, and the valve 39 is located at the outlet of the expansion device 27. Nakayama does not disclose the claimed invention, and Applicant respectfully requests that the rejection be withdrawn.

Claims 2, 3, 5, 6 and 12 stand rejected under 35 USC 103(a) as being obvious over Vogel in view of Kuroki (U.S. Patent No. 6,418,737). Claims 2, 3, 5, 6 and 12 depend on independent claim 1 and are allowable for the reasons set forth above. Adding Kuroki to Vogel still does not teach the claimed invention. Neither reference teaches a refrigeration system including a refrigerant line that bypasses a heat rejecting heat exchanger between a discharge of a compression device to an inlet of an expansion device. Therefore, the combination of the references does not teach, suggest or disclose the claimed invention. Claims 2, 3, 5, 6 and 12 are not obvious, and Applicant respectfully requests that the rejection be withdrawn.

Thus, claims 1-20 are in condition for allowance. No additional fees are seen to be required. If any additional fees are due, however, the Commissioner is authorized to charge Deposit Account No. 50-1482, in the name of Carlson, Gaskey & Olds, P.C., for any additional fees or credit the account for any overpayment. Therefore, favorable reconsideration and allowance of this application is respectfully requested.

10/12/2004 TUE 10:28 FAX 12489888363 Carlson, Gaskey & Olds

009/009

60246-214
10678

Respectfully Submitted,
CARLSON, GASKEY & OLDS, P.C.

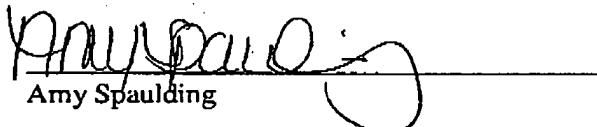


Karin H. Butchko
Registration No. 45,864
400 West Maple Road, Suite 350
Birmingham, Michigan 48009
Telephone: (248) 988-8360
Facsimile: (248) 988-8363

Dated: October 12, 2004

CERTIFICATE OF FACSIMILE

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, (703) 872-9306 on October 12, 2004.


Amy Spaulding